

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554**

In the Matter of	)	
	)	
Petition for Rulemaking to Amend the	)	RM-11788
Commission’s Rules Regarding the Citizens	)	
Broadband Radio Service in the 3550-3700 MHz	)	
Band	)	
	)	
Petition for Rulemaking to Maximize	)	RM-11789
Deployment of 5G Technologies in the Citizens	)	
Broadband Radio Service	)	
	)	
Amendment of the Commission’s Rules with	)	GN Docket No. 12-354
Regard to Commercial Operations in the 3550-	)	
3650 MHz Band		

**REPLY COMMENTS OF AT&T SERVICES, INC.**

**I. INTRODUCTION AND SUMMARY**

AT&T Services Inc., on behalf of the subsidiaries and affiliates of AT&T Inc. (collectively “AT&T”) hereby submits the following reply to comments in response to the Petitions for Rulemaking of CTIA—The Wireless Association (“CTIA”)<sup>1</sup> and T-Mobile (with CTIA, the “Petitioners”)<sup>2</sup> in the above-captioned proceeding.<sup>3</sup> As discussed below, the record supports the Commission making modest changes to the existing rules to strike a balance between Priority Access License (“PALs”) and General Authorized Access (“GAA”) use of the

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<sup>1</sup> CTIA Petition for Rulemaking, RM-11788, (filed Jun. 16, 2017) (“CTIA Petition”).

<sup>2</sup> T-Mobile Petition for Rulemaking, RM-11789, (filed Jun. 19, 2017) (“T-Mobile Petition”).

<sup>3</sup> *Amendment of the Commission’s Rules with Regard to Commercial Operations in the 3550-3650 MHz Band*, Report and Order and Second Further Notice of Proposed Rulemaking, 30 FCC Rcd. 3959 (2015) (“*Report and Order and Second FNPRM*”).

3.5 GHz spectrum band. The 3.5 GHz spectrum, with the slight modifications suggested by the Petitions for Rulemaking, will enhance the development and implementation of 5G technologies and services. As the record demonstrates, the overall licensing framework will be strengthened by minor alterations to the PAL structure to the benefit of all potential users of the band.

## **II. THE RECORD SUPPORTS MODIFICATION OF THE EXISTING PAL FRAMEWORK**

### **A. Commenting Parties Have Demonstrated the Necessity of Minor Alterations to the CBRS Licensing Rules**

Commenters have stressed the importance of greater certainty needed for investment in PAL licensing. U.S. Cellular argues that the “unreasonably short three-year terms for PALs and the inability to renew PALs for subsequent terms will greatly diminish the attractiveness of PALs because this licensing framework would give rise to an unreasonable risk that licensees’ investments in the 3.5 GHz will become stranded.”<sup>4</sup> T-Mobile notes that “the existing license term and licensed spectrum assignment method will create uncertainty, curbing interest in the 3.5 GHz band and depressing potential investment by all spectrum users – PAL licensees and GAA operators.”<sup>5</sup> Ericsson asserts that “certain CBRS rules governing [PALs] . . . are not tailored to advance innovation and investment.”<sup>6</sup> Verizon contends that by modifying the CBRS rules “the Commission would greatly improve incentives for private investment in the PAL framework and bolster development and innovation in the 3.5 GHz band as a whole.”<sup>7</sup>

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<sup>4</sup> Comments of U.S. Cellular Corp., GN Docket No. 12-354, at 2 (Jul. 24, 2017) (“U.S. Cellular Comments”).

<sup>5</sup> Comments of T-Mobile USA, Inc., GN Docket No. 12-354, at 5 (Jul. 24, 2017) (“T-Mobile Comments”).

<sup>6</sup> Comments of Ericsson, GN Docket No. 12-354, at 2 (Jul. 24, 2017) (“Ericsson Comments”).

<sup>7</sup> Comments of Verizon, GN Docket No. 12-354, at 1 (Jul. 24, 2017) (“Verizon Comments”).

AT&T supports the points made by commenters that altering the existing CBRS rules to allow for more licensing certainty for PAL licenses will enhance the long-term investment possibilities for the 3.5 GHz band. Indeed, contrary to assertions made by Public Knowledge/New America,<sup>8</sup> changes to provide investment certainty to the PAL framework will allow all interested parties to develop and deploy new business and consumer services.<sup>9</sup> By assuring that PALs flourish, greater overall investment in equipment for the entire spectrum band will occur – leading directly to scale and scope efficiencies not only for PAL entities but for GAA users as well.

**B. The Record Demonstrates the Need for Longer License Terms and A Renewal Expectancy**

Commenters support modifying PAL licensing requirements to ten-year terms with a right of renewal rather than the existing single three-year term. Ericsson argues that “[t]he current PAL licensing framework, which provides for a three-year license term and no right of renewal, creates the risk that PAL licensees will face stranded investments, will likely diminish interest in PALs, and may undermine the success of the three-tiered sharing regime.”<sup>10</sup>

Similarly, “[t]he present 3.5 GHz licensing framework, with short three-year license terms and

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<sup>8</sup> Comments of Open Technology Institute at New America and Public Knowledge, GN Docket No. 12-354, at 7-12 (Jul. 24, 2017) (“New America/Public Knowledge Comments”).

<sup>9</sup> Comments of Boingo Wireless, Inc., GN Docket No. 12-354, at 1-2 (Jul. 24, 2017) (“Boingo Comments”) (“Boingo agrees with T-Mobile’s argument that deploying a network takes several years, and that a less than 10-year license term is not sufficient to ensure that licensees will be able to recover a return on investment and that lack of a renewal expectation decreases the incentive to invest in infrastructure. Similarly, neutral host operators such as Boingo will be negatively affected because carriers will be less willing to invest in networks with shorter than ten-year license terms.”).

<sup>10</sup> Ericsson Comments at 6.

no renewal expectancy, severely undercuts the usefulness of the PAL tier.”<sup>11</sup> Verizon asserts that “one of the most effective ways for the Commission to promote deployment is to ensure that wireless providers are not discouraged from making the necessary multi-billion dollar investments due to the risk of losing their licenses only a few years after acquiring them.”<sup>12</sup>

AT&T agrees with these commenters that allowing for a ten-year license term with a renewal expectancy is consistent with the Commission’s rules in other spectrum bands,<sup>13</sup> will enable and encourage investment and deployment without undue risk of stranded investment, and will allow for the development of a balanced and robust regime for the entire 3.5 GHz ecosystem.

**C. Increasing Geographic Area Licensing Sizes Will Mitigate Interference Concerns and Not Impede Spectrum Access for Smaller Entities**

AT&T agrees with parties who argue that the PAL framework can be improved by licensing on a Partial Economic Area (“PEA”) basis rather than maintaining the existing Census tract licensing scheme. As an initial matter, PEA-based licensing would result in 416 license areas, a far more manageable scenario than that currently in place.<sup>14</sup> T-Mobile asserts that “PEAs are based on familiar and manageable Cellular Market areas and will reduce border areas and minimize the risk of interference, while also providing flexibility and encouraging

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<sup>11</sup> Comments of QUALCOMM Incorporated, GN Docket No. 12-354, at 7 (Jul. 24, 2017) (“Qualcomm Comments”).

<sup>12</sup> Verizon Comments at 4.

<sup>13</sup> See e.g., 47 C.F.R. § 27.13 (WCS licenses have ten year terms, AWS-1 licenses have ten year terms, BRS/EBS licenses have ten year terms, AWS-4 licenses have ten year terms, H Block licenses have ten year terms). See also, 47 C.F.R. § 27.14 (demonstrating a number of licensed services have renewal expectancy).

<sup>14</sup> U.S. Cellular Comments at 3.

participation by a wide array of carriers.”<sup>15</sup> Ericsson argues that “[t]he current framework provides for PAL licensing on a census tract geographic basis, which could lead to an unmanageable auction and management of 500,000 separate PAL licenses.”<sup>16</sup> AT&T agrees with parties who argue that larger geographic area licensing will decrease the difficulty of coordinating interference in border regions.<sup>17</sup> The record makes clear that adoption of PEA-based licensing will greatly improve the PAL scheme, while simultaneously reducing the number of border areas that PAL licensees will need to manage.

The parties that have asked that census tract-based licensing be maintained rely on flawed premises. They present two faulty arguments: (1) PEA licensing would inhibit the ability of small entities to win PALs at auction and (2) spectrum would lay fallow if large geographic area licensing was implemented.<sup>18</sup> The Commission’s recent auction and spectrum allocation efforts make clear that neither argument is a valid basis for the adoption of smaller license areas. PEAs have been used most recently by the Commission in the incentive auction for 600 MHz spectrum – rather than inhibiting participation, this auction resulted in 50 different parties (many of which were small entities) successfully obtaining spectrum licenses.<sup>19</sup> Moreover, in the Commission’s

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<sup>15</sup> T-Mobile Comments at 4-5.

<sup>16</sup> Ericsson Comments at 6.

<sup>17</sup> Ericsson Comments at 6 (“The framework is overly complicated, will create administrative burdens for the Commission and licensees, and will lead to increased interference risks between adjacent PALs.”); Qualcomm Comments at 5 (“This licensing system provides for a previously unforeseen number of border areas with bi-directional co-channel interference risks.”).

<sup>18</sup> Comments of Google, Inc. and Alphabet Access, GN Docket No. 12-354, at 22 (Jul. 24, 2017) (“Google Comments”); New America/Public Knowledge Comments at 19-20.

<sup>19</sup> FEDERAL COMMUNICATIONS COMMISSION, Incentive Auction Dashboard, <https://auctiondata.fcc.gov/public/projects/1000> (2017).

recent AWS-3 and 700 MHz auctions, the Commission relied upon even larger licensing areas with 31 and 101 entities, respectively, winning spectrum licenses.<sup>20</sup> Once again, the winners in those auctions included established wireless companies of all sizes, as well as new entrants. Moreover, the Commission adopted its GAA regime to protect against inefficient spectrum use, and these rules serve to prevent 3.5 GHz spectrum from lying fallow as long as there is demand for it. Should a PAL licensee not utilize its spectrum, CBRS rules allow for Spectrum Access System (“SAS”) administrators to allow the use of the spectrum by GAA parties.<sup>21</sup> Furthermore, AT&T echoes those commenters who call for the adoption of partitioning and disaggregation rules (consistent with the regulations for other similar licensed services) contemporaneously with a shift to PEA licensing.<sup>22</sup> This would provide greater flexibility to prospective PAL licensees

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<sup>20</sup> *Auction of Advanced Wireless Services (AWS-3) Licenses Closes: Winning Bidders Announced for Auction 97*, Public Notice, DA 15-131 (rel. Jan. 30, 2015), [https://apps.fcc.gov/edocs\\_public/attachmatch/DA-15-131A1\\_Rcd.pdf](https://apps.fcc.gov/edocs_public/attachmatch/DA-15-131A1_Rcd.pdf); *Auction of 700 MHz Band Licenses Closes: Winning Bidders Announced for Auction 73*, Public Notice, DA 08-595 (rel. Mar. 20, 2008), [https://apps.fcc.gov/edocs\\_public/attachmatch/DA-08-595A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/DA-08-595A1.pdf).

<sup>21</sup> 47 C.F.R. § 96.29(d) (“Except in Rural Areas, when there is only one application for initial Priority Access Licenses in a License Area that is accepted for filing for a specific auction, no PAL will be assigned for that License Area, the auction with respect to that License Area will be canceled, and the spectrum will remain accessible solely for shared GAA use until the next filing window for competitive bidding of PALs. In Rural Areas, when there is only one application for initial Priority Access Licenses in a License Area, that applicant will be granted a PAL if otherwise qualified under the Commission's rules.”).

<sup>22</sup> U.S. Cellular Comments at 4-5 (“If the Commission authorizes PALs on the basis of PEAs, USCC also encourages it to permit the partitioning and disaggregation of PALs. As the Commission has explained, permitting partitioning and disaggregation ‘can facilitate the efficient use of spectrum, and expedite provision of services in areas that might not otherwise receive service in the near term.’” (*quoting* Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions, Report and Order, 29 FCC Rcd 6567, 6891 (2014)); Ericsson Comments at 7 (“Partitioning and disaggregation will ensure that any unused PAL spectrum can be assigned on a market-oriented basis to other users who desire access to PALs on a smaller geographic basis and will further ensure against concerns that spectrum will lay fallow in the band.”); T-Mobile Comments at 5; Verizon Comments at 8-9; Qualcomm Comments at 5.

by enabling them to acquire PAL rights in smaller geographic areas where their business needs call for it.

**D. Commenters Note That Changes to PALs Will Not Inhibit GAA Implementation**

AT&T agrees with commenters that the minor changes to the PAL regime should not have any adverse effect on the rapid deployment and implementation of GAA spectrum. Federated notes that changes to PALs should not “stall progress on certifications and launching services on GAA spectrum.”<sup>23</sup> Verizon asserts that modifications “will not – and should not – delay or otherwise compromise deployment of CBRS.”<sup>24</sup> T-Mobile and CTIA’s proposals<sup>25</sup> regarding PAL license terms, renewal procedures, and market sizes do not change the rules regarding GAA use of the 3.5 GHz band in any way. GAA users will still be able to access the full 150 MHz of the 3.5 GHz band under the same rules and procedures adopted by the Commission in its *Report and Order*. Adopting minor changes to the existing CBRS rules need not delay the rollout of GAA products and services. Regardless of whether the Commission initiates a rulemaking, its GAA rules remain unchanged and in force. Under these rules, GAA use of the band is not contingent on PAL use in any way. Indeed, by reforming the PAL licensing process, the Commission has the ability to significantly improve the 3.5 GHz ecosystem for everyone, including GAA users.

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<sup>23</sup> Comments of Federated Wireless, Inc., GN Docket No. 12-354, at 4 (Jul. 24, 2017) (“Federated Comments”).

<sup>24</sup> Verizon Comments at 1.

<sup>25</sup> CTIA Petition for Rulemaking, RM-11788, (filed Jun. 16, 2017) (“CTIA Petition”); T-Mobile Petition for Rulemaking, RM-11789, (filed Jun. 19, 2017) (“T-Mobile Petition”).

**E. The Record Supports Updating the CBSD Registration Process To Protect Sensitive Information**

Making Citizens Broadband Radio Service Device (“CBSD”) registration information available to the public would potentially harm competition, consumers, national security, and cybersecurity severely. Neither the Commission nor any parties commenting in this proceeding have offered a persuasive reason that this information should be publicly available, and numerous commenters have stressed the importance of protecting this data.

Contrary to claims made by some commenters, making CBSD registration information public is not necessary to enable three-tier sharing or to allow both GAA and PAL users to plan deployment of spectrum with a SAS database.<sup>26</sup> GAA users will coordinate with a SAS to determine where they can deploy CBSDs, and SAS Administrators managing the frequency assignments will share information amongst themselves. A SAS need not share CBSD registration data with the public to effectively perform its function of managing frequency assignments. Additionally, Google is incorrect in asserting that CTIA’s approval of a model sharing agreement amounts to approval of public availability of information about CBRS deployments.<sup>27</sup> Instead, that agreement addresses SAS-to-SAS information sharing, not public availability of information. Furthermore, Google incorrectly assumes that operators – whether

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<sup>26</sup> See, e.g., New America/Public Knowledge Comments at 32 (“By keeping site-based deployments secret, CTIA and T-Mobile make it nearly impossible for WISPs and other operators to assess whether there is enough vacant PAL spectrum in an area to support a deployment. Secrecy would also make it difficult for PAL holders to assess on their own why they might be experiencing interference, or to assess whether certain PALs are more likely to be available for auction because licensees have not built out.”).

<sup>27</sup> See Google Comments at 29 (“There is no reason why anonymized information about CBRS deployments should present greater security or competitive concerns. In contrast, there are legitimate reasons to make this information publicly available, such as enabling potential operators to investigate the feasibility of providing GAA services in an area prior to incurring the cost of attempting to reserve specific spectrum.”).



licensed or not – plan their network deployment based on the activities of others rather than on internal objectives and consumer behavior.

Instead, AT&T agrees with Ericsson that “[d]isclosing CBSD registration information to the general public will not serve any useful purpose, and the harms outweigh any purported benefits. SAS Administrators will already be required to coordinate with each other, and members of the public can therefore work with a SAS to determine where they can deploy CBSDs on a GAA basis. The Commission’s requirement that SAS Administrators obfuscate licensees’ identities will not address security concerns, and is insufficient to address privacy and competitive concerns.”<sup>28</sup> Furthermore, making CBSD registration information publicly available flies in the face of nationwide efforts to protect key infrastructure from cybersecurity threats.

### **III. CONCLUSION**

In addressing CTIA and T-Mobile’s petitions for a rulemaking, the Commission should focus on how it can facilitate investment in the 3.5 GHz band and ensure the United States maintains and extends its global leadership in wireless with the deployment of 5G. The record supports modification of the existing PAL framework, demonstrating the necessity of minor alterations to the CBRS licensing rules, the need for longer license terms and renewal expectancy, and the need to increase the geographic area of licensing sizes, which will mitigate interference concerns and not impede spectrum access for smaller entities. Contrary to what some critics of the proposed changes might argue, none of these proposed changes to the rules

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<sup>28</sup> Ericsson Comments at 8-9; *See also* Verizon Comments at 9 (“By prohibiting the public disclosure of CBSD registration information, the Commission will avoid a potentially harmful cybersecurity risk and protect sensitive deployment information from disclosure to competitors.”).

will inhibit GAA implementation. Creating ten-year license terms for PAL licensees will create a measure of certainty that will enhance the value of licenses at auction. Increasing the license areas from census tracts to Partial Economic Areas will simplify licensing and promote more efficient use of the spectrum. Reforming the rules will promote a thriving ecosystem that fosters investment and innovation that will yield products that can be used by both GAA and PAL licensees and ensure a successful 3.5 GHz PAL auction in the future.

Respectfully Submitted,

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August 8, 2017

## CERTIFICATE OF SERVICE

I, Cathy Smithmeyer, do hereby certify that on this 8th day of August, 2017, I caused a copy of the foregoing Comments to be served via U.S. Mail on the following:

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